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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/813,835

04/01/2004

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7590

02/24/2006

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EXAMINER

GARBER, CHARLES D

ART UNIT

PAPER NUMBER

2856

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/813,835	Applicant(s) LANGLEY ET AL.	
	Examiner Charles D. Garber	Art Unit 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02/10/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 02/10/2006 have been fully considered but they are not persuasive.

Regarding the rejection under 35 USC 112, 2nd paragraph, Applicant argues action of a camera is inherently to record. Argument is based on dictionary definition of a camera which includes:

"a device that consists of a lightproof chamber with an aperture fitted with a lens and a shutter through which the image of an object is projected onto a surface for recording (as on film) or for translation into electrical impulses (as for television broadcasting)"

Examiner considers that from this definition a film camera may record but a video or television camera may broadcast. As Applicant discloses the cameras in the instant invention are television rather than film cameras the instant invention does not inherently record but merely broadcasts.

Applicant also argues the diagrammatic representation of the cameras and flow sheet in the disclosure would be sufficient for the man skilled in the art to understand the features of the present invention.

Examiners review of the disclosure diagrams does not reveal any representation of recording, recording media or recording means in the sense of "to cause (as sound, visual images, or data) to be registered on something (as a disc or magnetic tape) in reproducible form" per Examiner's understanding of the term.

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Applicant also refers to the following passages in the disclosure as support against Examiner's holding that "record" as used in the claim does not necessarily mean "registered on something (as a disc or magnetic tape) in reproducible form":

Page 6, Lines 17 and 18	The fourth camera is mounted within the drum directly over the digital mil gauge to record digital mil gauge readings at any given point in time.
Page 9, Lines 12-14	the mil gauge probe 28 will read the coating thickness on the interior wall of the pipeline, the results of which reading will appear on the digital mil gauge 38. A camera 36 is positioned inside the non-rotatable drum 16 directly above the digital mil gauge 38, which camera records the readings shown on the digital mil gauge 38 and provides real-time video to a remote operator (not shown).
Page 10, Lines 1-3	the third camera 34 records the sweep and provides real-time video for the remote Operator. The third camera 34 also provides a visual record of any marks made by the holiday marker 24 when a void or holiday is detected by the conductive brush 22.
Page 10, Lines 3-6	The fourth camera 30 is mounted on the bottom portion of the hub 19 and positioned to view the slideable plunger 26 and mil gauge 28 such that the movements and readings of the mil gauge 28 are digitally recorded and may be monitored by a remote operator

Nevertheless, Examiner maintains these passages do not provide a clear and definite redefinition of a camera function to include "to cause (as sound, visual images, or data) to be registered on something (as a disc or magnetic tape) in reproducible form". All the functions described above and the claim language itself, which recites "cameras which simultaneously record the movements and data encountered by the inspection robot **to provide real-time feedback to a remote operator**" [emphasis added], could be taken to mean merely registering signal data for broadcast rather than recording signal data. Because there is no clear redefinition of the term "camera" or

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"record" the standard dictionary definitions are assumed to apply and a video camera does not function "to cause (as sound, visual images, or data) to be registered on something (as a disc or magnetic tape) in reproducible form". Such function may be attributed to a "camcorder" (which is "a small portable combined video camera and videocassette recorder" according to Merriam-Webster Online Dictionary) but cameras and camcorders are not considered to be equivalent items. Indeed, the definition of a camcorder would suggest to one having ordinary skill that video camera may not record and it must be combined with a recorder for recording to be enabled.

As for the art rejections, Applicant argues the McLean prior art invention is "a manual lance operation that requires physical control of the lance to move through the pipeline. This limits the distance that McLean can travel into a pipeline, unlike the present invention which is self powered. The majority of the McLean apparatus is not capable of entering the pipe, but only the head assembly portion can be inserted into the pipe."

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., self powering or apparatus capable of completely entering a pipe) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant also argues there is no suggestion that Gieger could be used in a pipeline. Examiner did not rely on Gieger for the vehicle entering a pipeline but for a

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camera on a pipeline vehicle and sliding mount for a probe. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites a camera which "records the movement". The term "record" is defined by Meriam-Webster Online Dictionary as "to cause (as sound, visual images, or data) to be registered on something (as a disc or magnetic tape) in reproducible form". However, Applicant's disclosure provides no means such as a disc or tape that may record data from the camera. Furthermore, the claim further qualifies the camera operation as providing "real-time feedback to a remote operator". It is not clear if Applicant intends for the camera device to record images as onto a tape or simply to transmit the data to a place where the data can be observed in real-time. For purposes of further examination Examiner will presume Applicant did not intend to record images as onto a tape because Applicant's have not disclosed means capable of doing so.

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Instead Examiner will presume Applicant merely intended the cameras to transmit data for real-time observation without a recording means.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over McLean (US Patent 3,039,428) in view of Geiger (US Patent 5,947,051).

McLean discloses a pipeline vehicle with conductive bristles 17 (brushes) that will emit sparks when encountering voids or holiday areas 21 which activates the device to apply paint to the area (claim 1).

McLean does not teach probe on slidable plunger that measures coating thickness nor a camera at the device front.

Geiger discloses a device for inspecting pipeline 10 coating teaching camera 35 at an end of the device which may be considered the front and thickness gauge 267

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mounted on enclosure 44 which is put in position against the surface to be inspected by ram 52 (see figures 1A, 1B, 25C, column 31 lines 19-22). The ram appears to comprise sliding members.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a forward camera which may be "used for navigation and guidance [sic]" to a location of interest. It would have been also obvious to one having ordinary skill in the art at the time the invention was made to provide a thickness gauge mounted on a slidable ram in order to engage the surface of interest and determine if the coating thickness is sufficient to withstand the expected environment.

As for the limitations:

"for the purpose of checking the coating at the interior surface of the pipeline at the weld seams thereon to determine the thickness of the coatings and for detecting for voids or holidays"; and

"brush that sweeps against the weld seam and emits a spark when a void is encountered"; and

"so that the site can be revisited for repair"; and

"for measuring coating thickness on the weld seam"; and

"to provide real-time feedback to a remote operator";

it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations *Ex parte Masham 2* USPQ2d 1647 1987).

Allowable Subject Matter

Claims 2-6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles D. Garber whose telephone number is (571) 272-2194. The examiner can normally be reached on 8:00 a.m. to 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Charles D. Garber
Primary Examiner
Art Unit 2856

cdg